

**REMARKS**

Reconsideration is requested.

Claims 54-96 are pending. Claims 71-74 and 93-96 have been withdrawn from consideration. Claim 75 has been revised to correct an inadvertent typographical error. Support for the amendment can be found throughout the originally-filed specification. No new matter has been added.

Reconsideration and withdrawal of the restriction requirement is again requested. A Rule 181 Petition for the Commissioner's review and consideration of the restriction requirement is attached.

Specifically, the Commission is requested in the attached to review and reverse the restriction requirement and instruct the Examiner to examiner all of the pending claims. At a minimum, the Commissioner is requested to provide a complete statement of the basis for any sustained restriction requirement.

As noted in the Response of April 7, 2005, to the restriction requirement of March 29, 2005, claims 54-63, 70-72, 75-85 and 92 are drawn to inks; claims 64-67 and 86-89 are drawn to methods; claims 68-69, 73-74, 90-91 and 95-96 are drawn to a recorded image; and claims 93-94 are drawn to an ink head.

The Examiner's statement to the contrary in the Office Action of September 21, 2006 that claims "71-74, and 93-96, drawn to a print head" as a basis for withdrawal of the claims from consideration is not understood and correction of the record is requested. Moreover, if the Examiner is intending to withdraw claims to "print head[s]" from consideration then presumably only claims 93 and 94, which define "an ink head", should be withdrawn and the remaining claims examined on the merits.

Moreover, the Examiner's basis for withdrawing the claims (i.e., "non-elected by original presentation") is not understood as previously pending and originally-filed claims 50 and 51 also defined an ink head.

The Commissioner's review of the Examiner's comments and actions in the Office Actions of March 29, 2005 and September 21, 2006, along with an examination of at least claims 54-92 and 95-98 are requested. A Decision on the attached Petition prior to the Examiner's next substantive Action is requested as the Decision may affect the scope of examination.

The Examiner is again requested to acknowledge receipt of the certified copies of the priority documents filed September 22, 2003. See request for same in the Remarks of the Amendment filed December 23, 2004.

The Examiner is again requested to acknowledge acceptance of the drawings filed September 22, 2003 or specific objection and/or rejection of the same. See request for same in the Remarks of the Amendment filed December 23, 2004.

Return of an initialed copy of the PTO-1449 Form filed February 11, 2004, pursuant to MPEP § 609, is again requested. The PTO 1449 Form filed with the Supplemental Information Disclosure Statement dated February 11, 2006 is similar to the PTO 1449 Form filed December 22, 2003 but for the correction of the dates of the first and third JP references in the former, as stated in the Supplemental Information Disclosure Statement. See request for same in the Remarks of the Amendment filed December 23, 2004.

The provisional obviousness-type double patenting rejection of claims 70 and 92 over claims 21, 22, 47 and 48 of the copending application Serial No. 10/713,226 is

traversed. Reconsideration and withdrawal of the provisional rejection are requested as the Examiner appears to have equated the “dynamic surface tension and static surface tension” of the noted claims whereas the dynamic surface tension and static surface tension of claims 70 and 92 of the present application relate to the dynamic surface tension and static surface tension of the ink composition (i.e., containing a coloring agent, a medium and a surfactant) whereas the dynamic surface tension and static surface tension of claims 21, 22, 47 and 48 of the copending application relate to the dynamic surface tension and static surface tension of the surfactant of claims 21, 22, 47 and 48 of the copending application. The Examiner’s basis for provisionally rejecting the claims is believed, with due respect, to be the product of the Examiner’s misinterpretation of the claims. Withdrawal of the provisional obviousness-type double patenting rejection of claims 70 and 92 over claims 21, 22, 47 and 48 of the copending application Serial No. 10/713,226 is requested.

The Section 112, second paragraph rejection of claims 66, 67, 88 and 92 is traversed. The claims are definite and withdrawal of the rejection is requested. Claim 66, for example, defines a method of claim 64 wherein the ink composition comprises a yellow pigment, a magenta pigment and a cyan pigment. Claim 66 does not indicate that the ink composition comprises a pigment selected from one of a group of a yellow pigment, a magenta pigment and a cyan pigment, as would be indicated in a “Markush group”. Claim 67 similarly defines the recited composition as comprising a blue pigment, a red pigment or a violet pigment, and a yellow pigment. One of ordinary skill in the art will appreciate therefore that claim 67 therefore defines the ink composition of the claimed method as containing a combination of a blue pigment, a red pigment, and

a yellow pigment or a blue pigment, a violet pigment, and a yellow pigment. Claims 88 and 92 are believed to be similarly definite.

Withdrawal of the Section 112 rejection of claims 66, 67, 88 and 92 is requested.

The Section 102 rejection of claims 54-58, 60-69, 75, 77-80 and 80-92 over Kato (U.S. Patent No. 6,440,203) is traversed. Reconsideration and withdrawal of the rejection are requested. The claims are submitted to be patentable over Kato and consideration of the following in this regard is requested.

The Section 102 rejection over Kato stated on pages 4-5 of the Office Action dated September 21, 2006 appears to be the same, verbatim, as the Section 102 rejection over Kato stated on pages 4-5 of the Office Action dated September 23, 2004. The Examiner has not provided any response to the applicants Remarks of December 23, 2004, relating to the rejection as is believed to be required by at least MPEP § 707.07(f). A new non-final Action on the merits is requested which responds to the applicants previous and present Remarks is requested in the event a rejection over the reference is maintained.

The Examiner had acknowledged however in the Office Action of September 23, 2004 that the subject matter of claims 7 and 11 are patentable over Kato. As noted in the Remarks of the Amendment dated December 23, 2004, claim 54, and claims dependent therefrom, have been drafted to include the subject matter of now-canceled claims 11 and 7, respectively, including any intervening claims. Claim 54 is a combination of previous claims 1 and 11, which the Examiner previously indicated as being patentable over Kato. Claims 55-58 and 60-69 are directly or indirectly dependent from claim 54 and should be therefore patentable over Kato. Independent

claim 75 is the same as now-canceled claim 35, which the Examiner had previously indicated as being patentable over Kato. See page 4 of the Office Action dated September 23, 2004. Claims 77-80 and 82-92 are directly or indirectly dependent from claim 75 and should be therefore patentable over Kato. The pending claims are submitted to have been recognized by the Examiner to be patentable over Kato.

Kato teaches an ink composition which requires, among other things, a first colorant and a second colorant. See, column 2, lines 33-35 of Kato. The first colorant of Kato is a pigment which has been rendered dispersible and/or dissolvable in water without any dispersant. See, column 2, lines 38-41 of Kato. The second colorant of Kato is a pigment dispersion which contains a pigment and a dispersant for dispersing the pigment. The second colorant of Kato includes a pigment which is not dispersed in the absence of a dispersant. See, column 3, line 66 through column 4, line 4 of Kato.

Kato is not believed to describe an ink composition of claims 54 and 75 containing a surfactant which is present at least in an amount of a critical micelle concentration.

The claims are submitted to be patentable over Kato.

The Section 102 rejection of claim 76 over Lauw (U.S. Patent No. 5,534,051) is traversed. Reconsideration and withdrawal of the rejection are requested as the Examiner has not demonstrated where Lauw inherently or literally teaches the invention of claim 76. Withdrawal of the rejection is requested.

The Section 103 rejection of claims 54-62, 64, 65, 68, 69, 75, "77-34", 86, 87, 90 and 91 over Yatake (U.S. Patent No. 5,746,818) is traversed. Reconsideration and

withdrawal of the rejection are requested. The claims are submitted to be patentable over Yatake and consideration of the following in this regard is requested.

The Section 103 rejection of claims 54-62, 64, 65, 68, 69, 75, "77-34", 86, 87, 90 and 91 over Yatake stated on pages 6-7 of the Office Action dated September 21, 2006 appears to be the same, verbatim, as the Section 103 rejection of claims 1-10, 15, 16, 19, 20, 26-34, 39-41, 46 and 47<sup>1</sup> over Yatake stated on pages 6-7 of the Office Action dated September 23, 2004. The Examiner has not provided any response to the applicants Remarks of December 23, 2004, relating to the rejection as is believed to be required by at least MPEP § 707.07(f). A new non-final Action on the merits is requested which responds to the applicants previous and present Remarks is requested in the event a rejection over the reference is maintained.

By the Examiner's own admission, Yakate fails to teach the properties required by the claimed ink compositions. See, page 7 of the Office Action dated September 23, 2004 and page 7 of the Office Action dated September 21, 2006. Moreover, the applicants submit that Yakate fails to suggest a composition of the claims. The

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<sup>1</sup> Claim 54 includes the details of claims 1, 5 and 11; claim 55 includes the details of claims 1, 2, 5 and 11; claim 56 includes the details of claims 1, 3, 5 and 11; claim 57 includes the details of claims 1, 4, 5 and 11; claim 58 includes the details of claims 1, 5, 6 and 11; claim 59 includes the details of claims 1, 5, 7 and 11; claim 60 includes the details of claims 1, 5, 8 and 11; claim 61 includes the details of claims 1, 5, 9 and 11; claim 62 includes the details of claims 1, 5, 10 and 11; claim 64 includes the details of claims 1, 5, 11 and 15; claim 65 includes the details of claims 1, 5, 11 and 16; claim 68 includes the details of claims 1, 5, 11 and 19; claim 69 includes the details of claims 1, 5, 11 and 20; claim 75 includes the details of claims 26 and 35; claim 77 includes the details of claims 2, 26 and 35; claim 78 (assuming the Examiner has rejected this claim) includes the details of claims 3, 26 and 35; claim 79 (assuming the Examiner has rejected this claim) includes the details of claims 26, 29 and 35; claim 80 (assuming the Examiner has rejected this claim) includes the details of claims 26, 30 and 35; claim 81 (assuming the Examiner has rejected this claim) includes the details of claims 26, 31 and 35; claim 82 (assuming the Examiner has rejected this claim) includes the details of claims 26, 32 and 35; claim 83 (assuming the Examiner has rejected this claim) includes the details of claims 26, 33 and 35; claim 84 (assuming the Examiner has rejected this claim) includes the details of claims 26, 34 and 35; claim 86 includes the details of claims 26, 35 and 40; claim 87 includes the details of claims 26, 35 and 41; claim 90 includes the details of claims 26, 35 and 46; and claim 91 includes the details of claims 26, 35 and 47.

Examiner's "position" (id) appears to be relying on an allegation of inherency (i.e., "it would have been obvious....that the ink composition [of the cited art]....would have similar properties..."), which is inappropriate as a basis for a Section 103 rejection, as opposed to an assertion that it would have been allegedly been obvious to have modified the compositions of Yatake to have made the presently claimed invention.

The Examiner is urged to appreciate that obviousness requires some teaching or suggestion in the cited art which would have motivated one of ordinary skill in the art to have made the claimed invention, with a reasonable expectation of success. Yatake fails to provide any such motivation. Moreover, inherent anticipation requires a demonstration or reasonable suggestion that the claimed compositions necessarily flow from the cited art. The Examiner has not established that claimed invention is taught by the cited art. The claims are submitted to be patentable over Yatake.

The Section 103 rejection of claims 54-62, 64-69, 75-84 and 86-91 over Hayashi (U.S. Patent No. 6,500,248) is moot in view of the above. The claims are submitted to be patentable over Hayashi and consideration of the following in this regard is requested.

The Section 103 rejection of claims 54-62, 64-69, 75-84 and 86-91 over Hayashi stated on pages 7-8 of the Office Action dated September 21, 2006 appears to be the same, verbatim, as the Section 103 rejection of claims 1-10, 15, 16, 19, 20, 26-34, 39-41, 46 and 47 over Hayashi stated on pages 7-8 of the Office Action dated September 23, 2004. The Examiner has not provided any response to the applicants Remarks of December 23, 2004, relating to the rejection as is believed to be required by at least

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MPEP § 707.07(f). A new non-final Action on the merits is requested which responds to the applicants previous and present Remarks is requested in the event a rejection over the reference is maintained.

As with the rejection based on Yatake, the Examiner appears to be relying on an alleged inherent teaching of Hayashi ("However it is the position of the Examiner that it would be [sic, have been] obvious to one of ordinary skill in the art that the ink composition as taught by Yatake [sic, Hayashi] would have similar properties as claimed by Applicant absent [sic, absent] evidence to the contrary." See, page 8 of the Office Action dated September 23, 2004 and page 8 of the Office Action dated September 21, 2006) to allege that the claimed invention would have been obvious from Hayashi. There is no teaching or suggestion of the presently claimed invention in Hayashi.

Unlike Yatake, Hayashi does at least teach a surface tension of the disclosed ink compositions (i.e., not more than  $40 \text{ mNm}^{-1}$  at  $20^{\circ}\text{C}$  (see, column 2, lines 59-60 of Hayashi)). Hayashi does not however teach whether the cited surface tension is a static or dynamic measurement. More importantly, Hayashi fails to teach or suggest the relationship between static and dynamic surface tension of the claimed invention. The cited art fails to teach or suggest the unexpected beneficial properties provided by the claimed invention, as exemplified by the present disclosure. The Examiner is requested to see, for example, Table 2 on page 75 of the present disclosure, which provides examples of the claimed invention and comparative examples wherein both the static surface tension and dynamic surface tension are each less than  $40 \text{ mN/m}$ . Unexpected benefits however are demonstrated where the exemplified compositions satisfy the claimed relationship between the dynamic surface tension and static surface tension.



The claimed invention is patentable over Hayashi.

The claims are submitted to be in condition for allowance and a Notice to that effect is requested. The Examiner is requested to contact the undersigned in the event anything further is required.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

By:                     /B. J. Sadoff/                      
                    B. J. Sadoff  
                    Reg. No. 36,663

BJS:  
901 North Glebe Road, 11th Floor  
Arlington, VA 22203-1808  
Telephone: (703) 816-4000  
Facsimile: (703) 816-4100